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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,876	02/12/2002	Wolfgang Ruf	P21902	2423
7055	7590	12/23/2003	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			FORTUNA, JOSE A	
			ART UNIT	PAPER NUMBER
			1731	
DATE MAILED: 12/23/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 101203

Application Number: 10/072,876  
Filing Date: February 12, 2002  
Appellant(s): RUF ET AL.

\_\_\_\_\_  
Neil F. Greenblum  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**  
**DEC 20 2003**  
**GROUP 1700**

This is in response to the appeal brief filed on September 29, 2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-53 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 11, 15, 17-23, 31, 35, 37-42, 44, and 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruf et al., US Patent No. 5,645,689.

Ruf et al. teach a Multilayer headbox having at least one lamella disposed between a nozzle chamber, see abstract. Ruf et al. teach that the lamella(s) has/have upstream structure and a downstream structure. The downstream portion having first surface, a sloped portion and second surface opposed to the first surface, see figures 5-8. The figures also show the sloped part faces one of the nozzle walls. Ruf et al. teach in column 5, lines 39-44, that the nozzle walls can be provided with a deformable strip, called screen and *teach in column 4, line 64 through column 5, line 6 and shown in figure 6, that the lamella can be provided with a non-planar surface, i.e., the combination of the structure 9.6 and 8.6 of figure 6 or form a non planar surface and in figure 7, the top side 9.7, includes a horizontal surface and a sloped surface.* In column 6, lines 1-62, Ruf et al. teach that the headbox have a sectional consistency control, i.e., dilution water can be introduced to the headbox through sectional pipes. In column 3, lines 60-64, Ruf et al. teach that the lamella can swivel, pivotally mounted, or can be rigidly secured, fixedly mounted.

Art Unit: 1731

Claims 1-3, 15, 17-23, 31, 35, 37-42, 44, and 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanford, US Patent No. 4,941,950, (cited in Information Disclosure Statement of paper no 3).

Sanford teaches a Multilayer headbox having at least one lamella/trailing element disposed between a nozzle chamber, see abstract. Sanford teach that the lamella(s) has/have upstream structure and a downstream structure. The downstream portion having first surface (50), a sloped portion, (24D) and second surface opposed to the first surface (22D), see figures 7-9. The figures also show the sloped part faces one of the nozzle walls. Sanford teaches in column 3, lines 7-26 the use of groves in the first and/or second lamella surface and teaches, same column and lines, that the lamella can swivel, pivotally mounted within the slice chamber

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 12, 32, 46 and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruf et al., (cited above) in view of Sanford, US Patent No. 4,941,950 (cited in the IDS filed on May 12, 2002).

Ruf et al. do not teach a grooved surface on the trailing elements or lamella. However, Sanford teaches that including grooves in the surfaces of the lamella/trailing elements help in the reduction of turbulence within the slice chamber, improving the paper formation, see column 3, lines 7-26. Therefore, adding grooves to Ruf et al. lamella as suggested by Sanford would have been obvious to one of ordinary skill in the art in order to improve paper formation.

Claims 4-10, 13-14, 16, 24-30, 33-34, 36, 43 and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruf et al or Sanford, both cited above.

Ruf et al. and Sanford are silent with respect to the specific of the above claims, i.e., the angle, thickness and size of the lamella, the polymers used to make the lamella. However, it has been held that changing of size and geometric form of a device is within the levels of ordinary skill in the art absent a showing of unexpected results. It has been held that “[C]hanges in size, shape without special functional significance are not patentable. Research Corp. v. Nasco

*Industries, Inc.*, 501 F2d 358; 182 USPQ 449 (CA 7), cert. denied 184 USPQ 193; 43 USLW 3359 (1974).

**(11) Response to Argument**

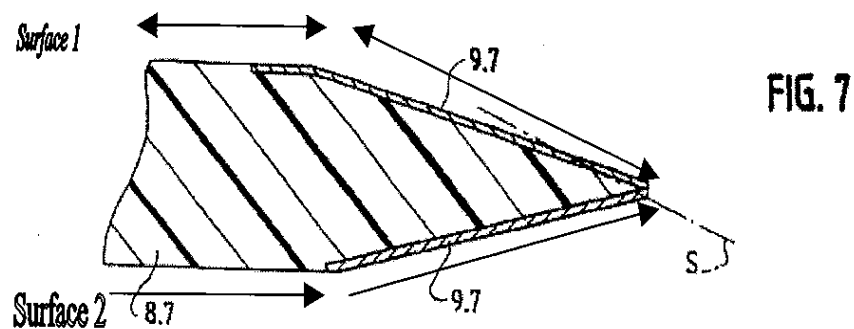
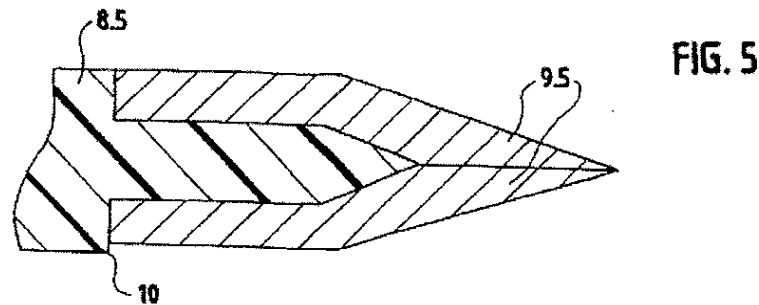
Applicant's arguments filed on September 29, 2003 have been fully considered but they are not persuasive.

Regarding 102(b) rejection over Ruf, applicants argue that none of the surfaces shown by the cited reference are non-planar and that therefore, the second surface does not meet the requirement(s) of the claims, i.e., a non-planar second surface.

This is considered non-persuasive, since figures 5-8 show the non-planarity of the surfaces<sup>1</sup>. Figure 5 for example shows first surface 9.5, having a horizontal side and an sloped side, (first part of the claim), and a second side opposite to the first side which is formed by two structures which are not in the same plane, i.e., non-planar surface, (the second surface of the claim(s)). The same can be seen in figure 7, which is formed at the top by a horizontal side joined to a sloped side, 9.7, and a second side opposite to the first one formed by 8.7 and 9.7, bottom part, which are not situated in the same plane and therefore are non-planar and meets the requirement(s) of the independent claims, see details below.

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<sup>1</sup> It seems that applicants' interpretation of non-planar refers to a curved surface, and while a curved surface is/or could be non-planar, a non-planar surface is broader than that. A non-planar surface is a structure in which a least part of it, the structure, is located in a different plane with respect to another.



Note that figure 7 seems to be identical to what is shown in figure 3 of the instant invention/application.

Applicants also argue that figure 2 of Ruf shows that a constant distance is maintained between the surface of the nozzle tips 1 and 1'. This is also not convincing, because what is shown is the tip of the headbox, front the view of the arrow. What figure 2 shows is that at the tip of the headbox, the slice tip and the lamella tip are in oriented in the same manner, i.e., the top surface of the slice at its end is oriented downwards, same as the tip of the lamella's first surface; same for the other side. Figure 2 of the cited reference, Ruf, does not tell anything about the internal parts of the lamella. Note also that the same would be shown if figures 2 and 3 of the present application are viewed in the same direction as figure 2 of the cited reference, Ruf. Note



Art Unit: 1731

that figure 2 is a view of the headbox in the direction of the arrow, not a cut in the direction of the arrow. A cut in the direction of the arrow would show figures 5-8.

Regarding claims 2-3, it is the examiner opinion that they just show what the reference implicitly or explicitly have. For example, claim 2 teaches that the lamella is mounted within a headbox supplying a suspension for forming a paper, paperboard or a tissue. This is argued by applicants as features that further define the invention. However, this limitation includes all the known type of papers and since Ruf teaches a paper-manufacturing machine, then those papers are covered by the reference, i.e., the headbox of the reference is used in the papermaking operation. Regarding claims 11, 15, 17-23, 31, 35, 37-42 and 48-50, those are discussed in the rejection above.

Regarding rejection under 102(b) over Sanford, the examiner has shown the different non-planar surface(s) of the lamella. Non-planar surface has been interpreted as in footnote 1. Under this interpretation Sanford meets the requirements of the claims.

Regarding rejection under 35 U.S.C. §103(a) over Ruf in view of Sanford. Applicants have just recited the feature of each claim, without stating why the combination of references is improper. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Regarding rejection under 35 U.S.C. §103(a) over Ruf or Sanford. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account

Art Unit: 1731


only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The examiner only argues that variations of the thickness and angles and shapes of the grooves on the lamella is within the levels of ordinary skill in the art and that such designs, i.e. shapes of the grooves, including even the size of the grooves, are not only obvious, but well known in the art, see for example US Patent No. 5639,352 or US Patent No. 4,532,009, attached as evidence, (not new ground of rejection).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A Fortuna whose telephone number is 703-305-7498. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0662.

  
José A Fortuna  
Primary Examiner  
Art Unit 1731

JAF

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